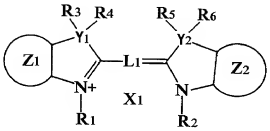
WE CLAIM:

1. In an optical recording medium which comprises a substrate and a recording layer provided on said substrate by using an organic dye compound and which records information by irradiating said recording layer with a writing light to act on said organic dye compound to form a pit on said substrate, the improvement wherein said organic dye compound has an absorption maximum at a wavelength longer than that of the writing light.

2. The optical recording medium of claim 1, wherein said organic dye compound is represented by Formula 1;

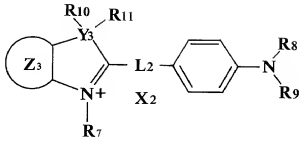
Formula 1:



in Formula 1, Z_1 and Z_2 denote the same or different optionally substituted aromatic rings; Y_1 and Y_2 independently denote carbon atoms or hetero atoms; R_1 and R_2 denote optionally substituted aliphatic hydrocarbon groups; R_3 to R_6 independently denote hydrogen atoms or compatible substituents, and when Y_1 and Y_2 are hetero atoms, the whole or a part of R_3 to R_6 does not exist; L_1 denotes a polymethine chain which may have a substituent and/or a cyclic group; and X_1 denotes a compatible counter-ion.

3. The optical recording medium of claim 1, wherein said organic dye compound is represented by Formula 2;

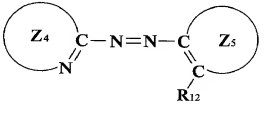
Formula 2:



in Formula 2, Z_3 denotes an optionally substituted aromatic ring; Y_3 denotes a carbon atom or a hetero atom; R_7 to R_9 denote the same or different optionally substituted aliphatic hydrocarbon groups; R_{10} and R_{11} independently denote hydrogen atoms or compatible substituents, and when Y_3 is a hetero atom, R_{10} and/or R_{11} do not exist; L_2 denotes a polymethine chain which may have a substituent and/or a cyclic group; and X_2 denotes a compatible counter-ion.

4. The optical recording medium of claim 1, wherein said organic dye compound is a metal complex of an azo compound represented by Formula 3;

Formula 3:



in Formula 3, Z_4 and Z_5 denote the same or different optionally substituted aromatic hydrocarbon groups or heterocycles; and R_{12} denotes an acid base.

5. The optical recording medium of claim 1, which uses

a laser beam with a wavelength of 700 nm or less as a writing light.

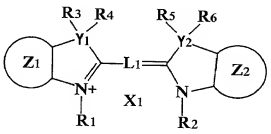
6. The optical recording medium of claim 1, wherein said organic dye compound has an absorption maximum with a wavelength less than 850 nm.

7. The optical recording medium of claim 1, which uses, in said recording layer, one or more other dye compounds sensitive to visible light and/or a compatible light-resistant improver(s) in combination.

8. In an optical recording method to record information by using an optical recording medium comprising a substrate and a recording layer provided on said substrate by using an organic dye compound and irradiating said recording layer with a writing light to act on said organic dye compound to form a pit on said substrate, the improvement comprising using, as a main organic dye compound for forming pits, an organic dye compound which substantially absorbs a writing light with a wavelength longer than the absorption maximum of said organic dye compound, and irradiating a recording layer on a substrate with the writing light to form a pit on said substrate.

9. The method of claim 8, wherein said organic dye compound is represented by Formula 1;

Formula 1:

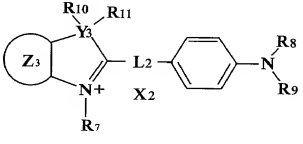


in Formula 1, Z_1 and Z_2 denote the same or different optionally

substituted aromatic rings; Y_1 and Y_2 independently denote carbon atoms or hetero atoms; R_1 and R_2 denote optionally substituted aliphatic hydrocarbon groups; R_3 to R_6 independently denote hydrogen atoms or compatible substituents, and when Y_1 and Y_2 are hetero atoms, the whole or a part of R_3 to R_6 does not exist; L_1 denotes a polymethine chain which may have a substituent and/or a cyclic group; and X_1 denotes a compatible counter-ion.

10. The method of claim 8, wherein said organic dye compound is represented by Formula 2;

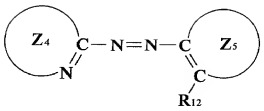
Formula 2:



in Formula 2, Z_3 denotes an optionally substituted aromatic ring; Y_3 denotes a carbon atom or a hetero atom; R_7 to R_9 denote the same or different optionally substituted aliphatic hydrocarbon groups; R_{10} and R_{11} independently denote hydrogen atoms or compatible substituents, and when Y_3 is a hetero atom, R_{10} and/or R_{11} do not exist; L_2 denotes a polymethine chain which may have a substituent and/or a cyclic group; and X_2 denotes a compatible counter-ion.

11. The method of claim 8, wherein said organic dye compound is a metal complex of an azo compound represented by Formula 3;

Formula 3:



in Formula 3, Z_4 and Z_5 denote the same or different optionally substituted aromatic hydrocarbon groups or heterocycles; and R_{12} denotes an acid base.

12. The method of claim 8, which uses a laser beam with a wavelength of 700 nm or less as a writing light.

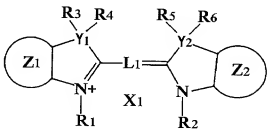
13. The optical recording medium of claim 8, wherein said organic dye compound has an absorption maximum with a wavelength less than 850 nm.

14. The optical recording medium of claim 8, which uses, in said recording layer, one or more other dye compounds sensitive to visible light and/or a compatible light-resistant improver(s) in combination.

15. An organic dye compound as claimed in claim 1 or 8.

16. The organic dye compound of claim 15 represented by Formula 1;

Formula 1:

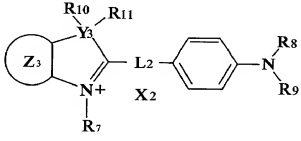


in Formula 1, Z_1 and Z_2 denote the same or different optionally

substituted aromatic rings; Y_1 and Y_2 independently denote carbon atoms or hetero atoms; R_1 and R_2 denote optionally substituted aliphatic hydrocarbon groups; R_3 to R_6 independently denote hydrogen atoms or compatible substituents, and when Y_1 and Y_2 are hetero atoms, the whole or a part of R_3 to R_6 does not exist; L_1 denotes a polymethine chain which may have a substituent and/or a cyclic group; and X_1 denotes a compatible counter-ion.

17. The organic dye compound of claim 15 represented by Formula 2;

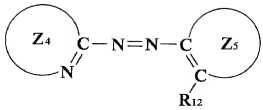
Formula 2:



in Formula 2, Z_3 denotes an optionally substituted aromatic ring; Y_3 denotes a carbon atom or a hetero atom; R_7 to R_9 denote the same or different optionally substituted aliphatic hydrocarbon groups; R_{10} and R_{11} independently denote hydrogen atoms or compatible substituents, and when Y_3 is a hetero atom, R_{10} and/or R_{11} do not exist; L_2 denotes a polymethine chain which may have a substituent and/or a cyclic group; and X_2 denotes a compatible counter-ion.

18. The organic dye compound of claim 15, which is a metal complex of an azo compound represented by Formula 3;

Formula 3:



in Formula 3, Z_4 and Z_5 denote the same or different optionally substituted aromatic hydrocarbon groups or optionally substituted heterocycles; and R_{12} denotes an acid base.